Applications of Nuclear Magnetic Resonance (NMR), Mass Spectroscopy (MS), and GC-MS to Food Science

Guest Editor:

Prof. Dr. Hesham El-Seedi
1. International Joint Research Laboratory of Intelligent Agriculture and Agri-Products Processing, Jiangsu Education Department, Zhenjiang 212013, China
2. Pharmacognosy Group, Department of Pharmaceutical Biosciences, Uppsala University, Biomedical Centre, Box 574, 751 23 Uppsala, Sweden

Deadline for manuscript submissions:
24 October 2024

Message from the Guest Editor

Dear Colleagues,

In the realm of food science, NMR and MS are indispensable tools for evaluating quality, detecting adulterants and identifying contaminants such as pesticides and mycotoxins. Their versatility and sensitivity make them invaluable for studying various aspects of food, including composition, safety and functionality, thereby significantly contributing to the enhancement of food products. Furthermore, NMR and MS are crucial for investigating the effects of preservation methods on food quality, monitoring reactions, identifying degradation products and assessing the impact of storage conditions. These techniques are instrumental and non-destructive tools in flavor and aroma analysis, enabling the identification and quantification of volatile compounds that influence sensory attributes. Moreover, they support metabolomics studies, facilitating the analysis of metabolic profiles in food samples to understand composition, biochemical pathways and health implications. Their multifaceted applications underscore their importance in food science and its various research areas.

Special Issue

Editor-in-Chief

Prof. Dr. Arun K. Bhunia
1. Department of Food Science, Purdue University, West Lafayette, IN, USA
2. Department of Comparative Pathobiology (Courtesy), Purdue University, West Lafayette, IN, USA

Message from the Editor-in-Chief

Foods (ISSN 2304-8158) is an open access and peer reviewed scientific journal that publishes original articles, critical reviews, case reports, and short communications on food science. Articles are released monthly online, with unlimited free access. Currently, Foods has been indexed by the Science Citation Index Expanded (SCIE - Web of Science), PubMed, and Scopus. Our aim is to encourage scientists, researchers, and other food professionals to publish their experimental and theoretical results as much detail as possible. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global food science community.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, FSTA, AGRIS, PubAg, and other databases.
Journal Rank: JCR - Q1 (Food Science and Technology) / CiteScore - Q1 (Health Professions (miscellaneous))

Contact Us